

IN THE CLAIMS

- 1 (Currently Amended). A method comprising:
- receiving, for speaker recognition, target speech data;
 - selecting a pair of distinct signal portions of said speech data, each including a signal attribute and noise;
 - identifying, for each portion, primarily signal attributes and primarily noise attributes; and
 - deriving a distance measure for one signal portion including noise by using the primarily signal attributes of both signal portions including noise attributes.
- 2 (Original). The method of claim 1, wherein deriving the distance measure including deriving a relative noise measure between the at least two signal portions by distributing the signal attributes over the at least two signal portions.
- 3 (Original). The method of claim 2, including:
- receiving training speech data including noise components and the at least two signal portions;
 - combining the signal attributes of the at least two signal portions into a signal content and combining the signal and noise attributes of the at least two signal portions into a signal and noise content;
 - calculating a compensation ratio of the signal and noise content to the signal content in order to derive the relative noise measure; and
 - adjusting a mismatch indicative of a noise differential between the noise components present in the training speech data and the noise attributes present in the at least two signal portions based on the relative noise measure.
- 4 (Original). The method of claim 3, including deriving from a training template, a signal profile based on a model trained on the training speech data to determine the mismatch between the noise components and the noise attributes.

5 (Original). The method of claim 4, including compensating the model in response to the relative noise measure while applying a parallel model combination mechanism.

Claims 6-10 (Canceled).

11 (Currently Amended). An article comprising a medium storing instructions that, if executed, enable a processor-based system to:

receive and store target speech data to be analyzed for speaker recognition;

select a pair of distinct signal portions of said speech data each including a signal attribute and noise;

determine primarily signal attributes and primarily noise attributes for each of said pair of portions; and

derive a distance measure for one signal portion by using the primarily signal attributes of both signal portions including noise attributes.

12 (Original). The article of claim 11, further storing instructions that enable the processor-based system to:

derive the distance measure by determining a relative noise measure between the at least two signal portions to distribute the signal attributes over the at least two signal portions.

13 (Original). The article of claim 12, further storing instructions that enable the processor-based system to:

receive training speech data including noise components and the at least two signal portions;

combine the signal attributes of the at least two signal portions into a signal content and combine the signal and noise attributes of the at least two signal portions into a signal and noise content;

calculate a compensation ratio of the signal and noise content to the signal content in order to derive the relative noise measure; and

adjust a mismatch indicative of a noise differential between the noise components present in the training speech data and the noise attributes present in the at least two signal portions based on the relative noise measure.

14 (Original). The article of claim 13, further storing instructions that enable the processor-based system to derive from a training template, a signal profile based on a model trained on the training speech data to determine the mismatch between the noise components and the noise attributes.

15 (Original). The article of claim 14, further storing instructions that enable the processor-based system to compensate the model in response to the relative noise measure while applying a parallel model combination mechanism.

Claims 16-26 (Canceled).

27 (Currently Amended). An apparatus comprising:
an audio interface to receive target speech data to be analyzed for speaker recognition, said target speech data including two portions each including speech; and
a control unit operably coupled to the audio interface, the control unit to determine primarily signal attributes and primarily noise attributes for each of said two signal portions and to derive a distance measure for one signal portion by using the primarily signal attributes of both signal portions including noise.

28 (Original). The apparatus of claim 27, further comprising:
a storage unit including an authentication database, said storage unit coupled to the control unit to store training speech data in the authentication database, wherein the control unit to:

derive the distance measure from a relative noise measure between the at least two signal portions by distributing the signal attributes over the at least two signal portions.

receive training speech data including noise components and the at least two signal portions to calculate a mismatch indicative of a noise differential between the noise

components present in the training speech data and the noise attributes present in the at least two signal portions;

combine the signal attributes of the at least two signal portions into a signal content and combining the signal and noise attributes of the at least two signal portions into a signal and noise content to calculate a compensation ratio of the signal and noise content to the signal content; and

adjust the mismatch with the compensation ratio in order to assess the speech based on the relative noise measure.

29 (Currently Amended). A wireless device comprising:

an audio interface to receive target speech data to be analyzed for speaker recognition that includes a noisy speech signal including an utterance;

a control unit operably coupled to the audio interface; and

a storage unit operably coupled to the control unit, said storage unit to enable:

determining signal attributes and noise attributes of at least two signal portions including speech and said target speech data, and

deriving a distance measure for one signal portion by using the signal attributes of both signal portions including noise.

30 (Original). The wireless device of claim 29 comprises a radio transceiver and a communication interface both adapted to communicate over an air interface.